

**GOVERNMENT OF INDIA
HEALTH AND FAMILY WELFARE
LOK SABHA**

UNSTARRED QUESTION NO:4638
ANSWERED ON:18.04.2001
HUMAN GENOME RESEARCH
UMMAREDDY VENKATESWARLU

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether the Indian Council of Medical Research (ICMR) has cleared over 120 proposals on human genome research;
- (b) if so, the details thereof alongwith the criteria adopted by ICMR in clearing the human genome projects, financial requirements, pattern of finance and the advantages which would accrue to the country from these proposals;
- (c) whether most of the original research in the field has already been done in other countries;
- (d) if so, the original and unique contribution of ICMR that would be in the field of genome research; and
- (e) the steps proposed to be weigh the advantage of repeating research already done elsewhere?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI A. RAJA)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA UNSTARRED QUESTION NO.4638 FOR 18.4.2001

Indian Council of Medical Research (ICMR) has considered so far 120 proposals on human genome research. The proposals have been examined by three special committees of experts which met on 14.2.2001 and a subsequent committee of experts on 28/29th March, 2001. A total number of 81 projects have been approved till now which will further be screened by an Apex committee in May, 2001 before final sanction. The project will be sanctioned to the investigators in near future. The usual pattern of funding followed by ICMR will be adopted for these also by way of giving research staff, contingencies and required equipments.

The criteria adopted for evaluating these proposals is the proven track record of the Investigators through prior research publications, availability of infrastructure at the parent Institution and the condition that the same work is not being funded by any other agency. Council has been working in the area of genome research for the last decade or so where it had already progressed to certain extent so that the leads could be further taken to the logical conclusion. In addition, work related to drug development, population genetics, cancer genomics, microbial genomics, vector genomics, reproduction, neurogenetics, pharmacogenomics, and nutrition genomics is also in progress.

The research on human genome and human genetics is a global effort launched by USA, Japan, France, Germany and China. The first map of human genome was released in June, 2000 and final one in Feb., 2001 for entire scientific community in the world to utilise this information for appropriate analysis for improving Health care system in respective countries. Structure of genome is announced and function of each gene, as relevant to each country, has to be taken up by all countries.

For identification of new genes for complex diseases and of genes that confer susceptibility/resistance to diseases in human, it is necessary to collect and create a data-base of partial genomic sequences on multiple individuals drawn from population isolates. There will be no repetition of any study done elsewhere whose results are already known. Information specific to Indian population will be funded taking care to avoid duplication even within the country.